



CITY OF SAN ANTONIO
**SOLID WASTE MANAGEMENT
DEPARTMENT**

FY 2020

ANNUAL REPORT



ESSENTIAL SERVICE



Letter from the Director

Any organization preparing an annual report for 2020 will most certainly lead with how the COVID-19 pandemic has affected its operations, employees, customers and community. Our Department is no different.

The services we provide San Antonio were considered essential meaning that our operations continued uninterrupted. Much of the work we do cannot be done remotely or via telecommuting. It would be a grim thought to imagine garbage piling up and not being collected on a regular basis. Our men and women were as much on the frontline as any other Department. Here are some of the adjustments we made to keep our customers and ourselves safe and protected.

As with all City facilities we established a screening policy for anyone entering any of our facilities and locations. Face coverings and social distancing were mandatory. Prominent signage was posted throughout all our buildings. We also allowed as many people as possible in our greater administration group to work from home. We misted our offices with disinfectant weekly and sanitized the interiors of our trucks.

Did these measures help? We are convinced that without them, some of our services would have been affected. Our people were vigilant, responsible and professional. There was a toll, however. We had a large number of co-workers out with illness and the lost hours of productivity were extremely high. With more of our customers staying home, the volume of garbage, recycling, organics, brush and bulky materials we collected went up by over 41,000 tons over last year. Our crews worked harder and longer than normal and with less people. I want to stop here and say a deeply heartfelt thank you to every Solid Waste Management Department employee. You are true champions.

It is also with great difficulty that I report a member of our Solid Waste family did lose his battle with COVID-19. For our employee Manuel Ruiz, we have renamed our Safety Training Facility in his honor. Manuel was passionate about his work and was a City employee for over 20 years. He is greatly missed.

During the year marked by bad news, there was some good news to report. Because our Department was financially solvent, we received 50 formerly furloughed employees from the Convention Center and Alamodome. Twenty-one people filled vacancies and found permanent positions. The remainder are on temporary assignment. We welcome them to the SWMD family.

Through a joint endeavor with the Office of Sustainability, we started to redesign our commercial recycling program, ReWorksSA to include new attributes of sustainability to the certification process. Beyond awarding local businesses a Gold, Silver or Bronze level for recycling, we will soon be able to help organizations establish or improve programs for water conservation, energy conservation and transportation. Reducing the City's carbon footprint one business at a time is the goal.

We entered a new contract for our organics composting process with a company called Atlas. This was a high-profile contract. Annually, we collect 70,000 tons of organic material that is processed into compost. This is a substantial component of the City's recycling goal, contributing 24% of recycled material. Waste reduction and organics diversion are significant aspects of the City's *Climate Action and Adaptation Plan*. In addition, Atlas uses electric equipment for sustainability as well as robotics to clean the material. Their contract-winning offer was to accept all SWMD loads and virtually eliminate the need to landfill rejected loads.

The Outreach and Education activities continued despite the changes within schools. The team went completely virtual with their presentations and in April and May alone, those presentations were viewed over 651 times online.

We are recovering. As I stepped into my new role as Department Director in February, taking the reins from the promoted David McCary, I have learned new skills in these unprecedented times. I want to thank our employees, customers, City leadership and all SWMD stakeholders for the support I have received. I am truly optimistic for 2021. We have proven that there is nothing we cannot handle.

Sincerely,

A handwritten signature in blue ink, appearing to read 'D. Newman', written in a cursive, flowing style.

David Newman
Director

Department Profile

The Solid Waste Management Department (the 'SWMD' or the 'Department') serves approximately 363,000 single-family San Antonio households, employs 773 individuals, and manages two major funds: (i.) the Solid Waste Operating and Maintenance Fund which was \$130.1 million in FY 2020, and; (ii.) the Fleet Services Fund which was \$19.9 million.

The SWMD is responsible for the collection of municipal solid waste generated by its customers, the residents of the City of San Antonio (the 'City'). Primary collection services include: (i.) weekly curbside collection of residential garbage, recyclables, and organics; (ii.) semi-annual residential collection of brush and bulky items, and; (iii.) other services by request. Additionally, the Department: (i.) administers the City's household hazardous waste (HHW) programs; (ii.) monitors and maintains closed City landfills; (iii.) operates two brush recycling centers; (iv.) operates four bulky waste Drop-Off Centers; (v.) provides dead animal collection, and; (vi.) services downtown litter baskets.

Supplemental services by request include out of cycle collections, special leaf collections, and a collection assistance service for customers with physical challenges. To support neighborhood clean-up efforts, community organizations can request large containers through the Dial-a-Trailer (DAT) program. Quarterly, the Department sponsors free landfill days to provide more opportunities for residents to conveniently and safely dispose of their

solid waste. Assistance is provided as needed for severe weather clean-up, illegal dumping, and recycling at some of San Antonio's larger city-wide special events. The Department also has Community Outreach and Commercial Recycling divisions.

The Solid Waste Operating and Maintenance Fund is an enterprise fund, requiring that the services provided to the customers are supported by fees charged to the customers for those services, making the fund self-supporting. The majority of its revenue is from the Solid Waste Fee and the Environmental Fee, both of which are placed on a customer's monthly CPS Energy bill. Additional revenues are derived from waste hauler permit fees, brush recycling fees, and the sale of mulch and recyclable materials. This fund receives no funding from any taxes.

The Fleet Services Fund is an internal services fund. The Department is responsible for the maintenance and repair of 2,063 heavy equipment vehicles for various City Departments. In this role, the Department ensures that vehicles are kept operational and ready for use throughout the City by using an integrated and programmatic service delivery approach.

Information current at time of printing.





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Operational Highlights

Brush and Bulky Collections

The Brush division provides two brush and two bulky collections per year, which covers the entire City four times a year. The division collected 49,204 tons of brush and 38,628 tons of bulky material. To notify customers of their upcoming collection the Brush division hand-delivered 1.4 million door hangers.

As part of the efforts to keep the City clean, the division is also tasked with addressing illegal dumping. The SWMD collected 1,732 tons of material that had been illegally dumped around San Antonio. Another program the division provided was the Dial-a-Trailer program which is geared for communities and non-profits interested in having clean-up events. This year, 44 events were hosted and 105 tons were collected. Due to the COVID-19 pandemic the program experienced a decrease in events.

The division includes two brush recycling centers at Bitters and Nelson Gardens. The brush sites receive all residential collected brush and are open to the public seven days a week. Between both sites, 93,717 tons of brush and vegetation were received.

Other highlights included a reduction of injuries over the prior year. The Department was able to purchase a new tub grinder for the Bitters location. The division was able to transition 30 furloughed City employees into the flyer distribution program.

Environmental Services

As stated in the Director's letter all volumes of materials coming to the SWMD increased due to COVID-19. For example, the Bulky Drop-Off Centers experienced a 20% increase compared to FY 2019. With more people staying home with time to do projects, customers brought 30,562 tons of bulky items to the locations. Of that tonnage, 2,282 tons were able to be recycled. Materials taken to the Household Hazardous Waste Centers totaled 1,031 tons and 541 tons were recycled.

There is a City ordinance that states the SWMD should ensure recycling is available at multi-family dwellings such as apartments. This division made approximately 1,300 inspections of those types of facilities to ensure the private haulers that service them are providing recycling opportunities.

Fleet Operations

This SWMD division provided repair and maintenance services to more than 2,000 pieces of off-road and on-road equipment, primarily for the Solid Waste Management Department, Transportation & Capital Improvements (TCI), Public Works, and the Parks & Recreation Department. It operated four heavy duty truck shops and one off-road heavy equipment shop with a staff of over 100 personnel. The shops performed service on equipment including garbage trucks, street sweepers, pothole patch trucks, aerial bucket trucks, brush and bulky grapple trucks, bulldozers and brush grinders.

Fleet operations ended FY 2020 with customer equipment available 89.9% of the time, which exceeded FY 2019. Managers continued to prioritize increasing in-house repairs and reducing outsourced maintenance this past year. Heavy equipment mechanics were responsible for 123,670 billable labor hours. This exceeded the previous fiscal year by almost 4,000 hours.

Safety

To expand upon the Director's Letter, the top priority was establishing protocols during the pandemic. Every SWMD location received promotional signage on best practices. Additionally, training videos were produced showing the proper screening process and several SWMD employees were also filmed sharing their experiences with COVID-19. These were so well received that the City's Human Resources Department shared them with all Departments.

Other safety achievements included several employee engagement promotions. A safety manual specifically for the Fleet division was published and distributed. A series of safety reminder posters were also created and installed in all locations. Working with ITSD, the Department was able to bring all digital signage monitors online in all locations. This tool was a tremendous improvement for the many employees that cannot receive email messages and could now watch rotating important information in their locations. Safety banners were a key part of the digital signage content.

ReWorksSA

The commercial recycling program continued to certify local businesses as Gold, Silver or Bronze level organizations for either starting or improving recycling programs in the workplace. As in many other areas of the SWMD, the team

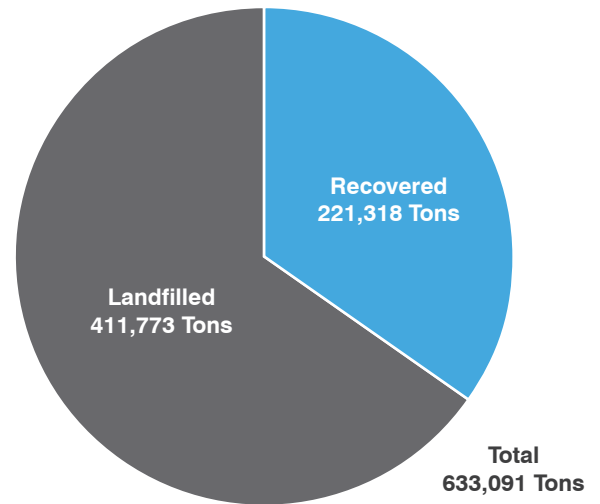
Operational Highlights

shifted to virtual assessments and site inspections that are essential in the certification process. The volume of businesses requesting this consultancy dipped as the pandemic worsened. The goal was to end the year at 170 certifications. This performance measure was under by 46 certifications.

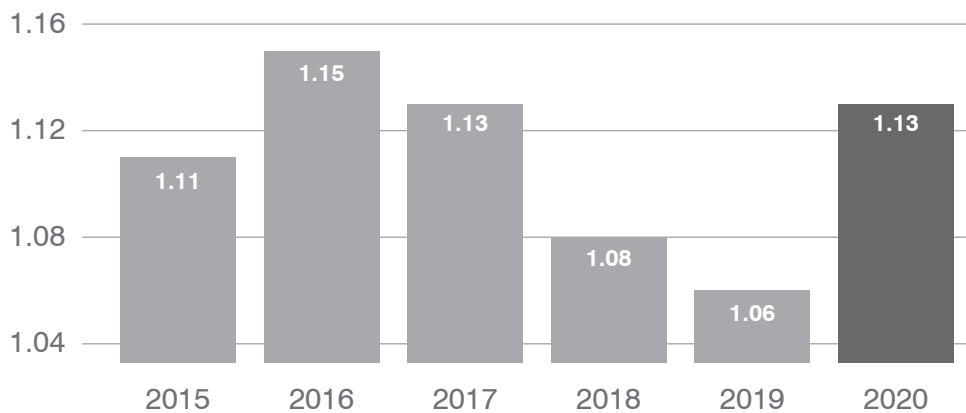
Equally important to the program is the recertification process. Certifications are valid for two years and then businesses must re-apply. Multiple recertifications were performed virtually and many Silver and Bronze companies had improved their programs within two years, advancing a level.

The brand remained strong and several of the program's marketing materials received multiple awards from industry competitions.

Material Recovered vs. Landfilled



Tons Landfilled per Household



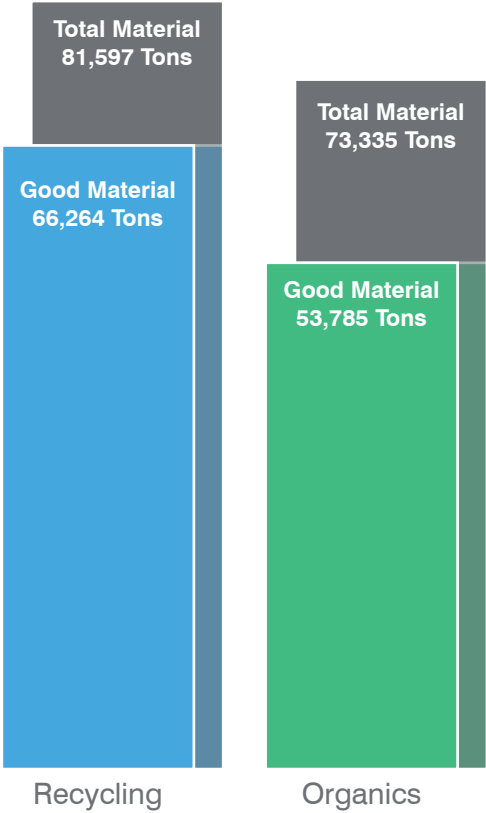
Recycling

In October, the Department made a presentation to the City Council Community Health and Equity Committee (CHEC) on the current and projected future of the recycling industry. The economics of recycling and the City’s recycling goal were key discussion points.

The SWMD submitted a report to Council in FY 2010 entitled, the *Recycling and Resource Recovery Plan, The Path to Zero Waste* (RRR Plan). Three goals were outlined and since that time, two of the three have been accomplished – access to recycling for multi-family dwellings (Ordinance passed in 2010) and improved recycling for local businesses (ReWorksSA launched in 2018.) The third goal was to achieve a 60% recycling rate by 2025. This metric would apply only for the recycling from SWMD residential customers. The Department laid out multiple factors that are currently, and will continue, making the achievement of this goal an extraordinary challenge. One emphasized strategy was that the SWMD will focus on the quality of its recyclables through simpler customer messaging about better participation in the program.

The recycling rate was established as a weight-based measurement based on the amount of recyclable materials collected. Two significant changes have occurred since the RRR Plan was written. Recyclables, specifically packaging has been getting steadily lighter over the past years. Also, in the digital age, heavy commodities such as paper, newsprint and mail are less prevalent. These two changes make a weight-based metric much more difficult to achieve.

Recycling Tonnage by Program



The Loteria Campaign
(see page 13)

The market for recycling commodities has also become more selective. In 2017, China, the largest buyer of recyclables started a policy to stop accepting contaminated materials. This triggered a significant market decline. Historically, contracts with Materials Recovery Facilities (MRFs) offset processing costs by the revenue from commodity sales. The shift in the global markets has made the margin of profit much smaller for MRFs and they have begun raising their processing fees. The City's contract with its recycling facility is currently very favorable with respect to fees. However, this contract expires in 2024 and the Department is already preparing for higher processing costs with any new contract.

In Spring of 2021 a decision will be required on one of these three options: i.) extend the contract with the current vendor; ii.) submit an RFP for new long-term contracts, or; iii.) build a city-owned facility. The Department began

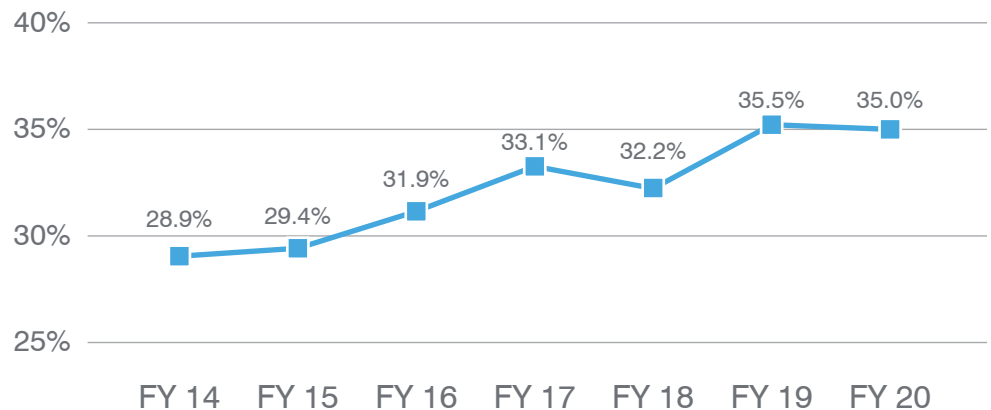
working with a consultant in FY 2020 to evaluate these options.

In FY 2020, recycling, having a net processing cost of around \$14 per ton, was still more economical than landfilling which was closer to \$26 per ton. The City's MRF was selling much of San Antonio's recyclables to North American markets. Major problems found in the blue carts remained single use plastic bags, Styrofoam®, and items that damaged the recycling equipment such as wires, ropes, cords and other items that can tangle up in gears.

Director David Newman concluded the October CHEC presentation by stating that in FY 2021, the Department will focus on quality and simpler messaging, to make recycling as easy as possible and eliminate as much confusion as possible. He also emphasized that, despite rising costs, recycling plays a critical role in San Antonio's sustainability.

Recycling Rate

This recycling graph is the aggregate of all SWMD recycling programs that include residential recycling (blue cart), organics (green cart), brush (curbside and Drop-Off Centers), and certain materials recovered from the bulky and HHW programs.



FY 2020 Capture Rate by Material

Newspaper	85.6%
Plastic #2 HDPE Colored Containers	57.4%
Corrugated Cardboard	56.6%
Mixed Glass	56.1%
Plastic #1 PET Containers	52.3%
Mixed Office Paper	37.1%
Aluminum Cans	33.0%
Tin/Steel Cans	29.8%
Plastic #2 HDPE Natural Containers	28.3%
Plastics #3 - #7	13.7%

Organics

The organics program generates over 70,000 tons of compostable material annually which contributes approximately 24% to the total of recycled material. The division fulfilled two major initiatives in FY 2020.

The popularity of the organics program continued to grow. This past fiscal year, the SWMD collected 73,335 tons of compostable material. The amount of rejected material was slightly higher than last year, but the SWMD is looking forward to some significant changes that will have a positive impact to the program in the coming years



Beginning January 1, 2021, compostable material will be processed at the City's Nelson Gardens facility. The change comes as the contract with the current processor, New Earth, expires. The composting operations will now be done by Atlas Organics. It was a thorough RFP evaluation started over a year ago which led to the new contract. Major scoring factors included: (i.) level of experience; (ii.) past contract performance; (iii.) pricing; (iv.) safety record, and; (v.) total resources in general. A review panel of six included representatives from

various City Departments. The panel concluded that Atlas Organics scored the highest overall.



One key factor that stood out about Atlas was their plan to make permanent improvements on City land. The plan would repurpose and improve the land surrounding the old Nelson landfill which is a great benefit. The new infrastructure and equipment installed will remain City property at the end of this 10-year contract. Atlas also had the best plan to address contamination and rejected loads. Through their proprietary sorting process, they are pioneering advanced technology. Atlas committed that the number of rejected loads, tonnage that would otherwise go to the landfill, would be greatly reduced if not eliminated altogether.

Other exciting news that began in FY 2020 was the joint effort of the City of San Antonio Office of Innovation and the Solid Waste Management Department to partner with Rubicon Global to develop a contamination detection tool through



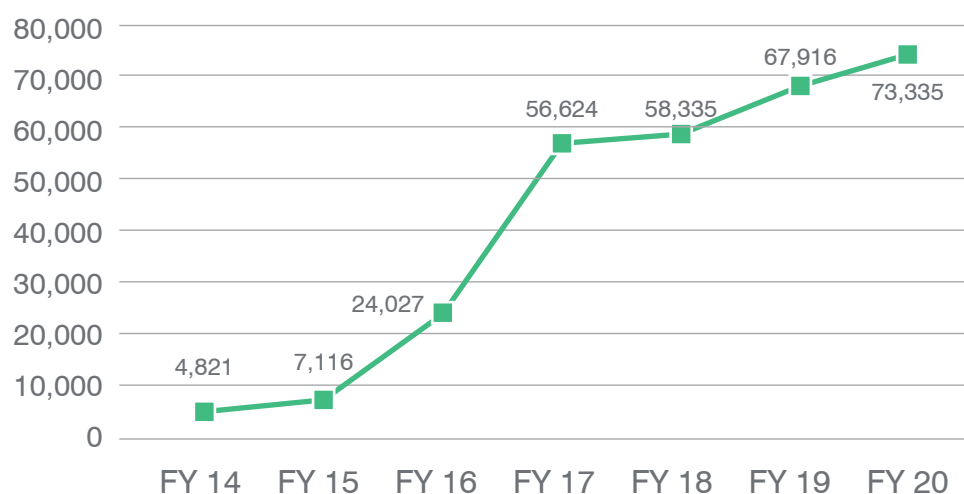


the CivTechSA Residency Program. CivTechSA is a partnership between San Antonio's Office of Innovation and Geekdom. The program's mission is to connect students, companies, and the tech community with the City to solve community challenges and grow civically-minded tech talent.

The purpose of this program with Rubicon is to develop a solution, using cutting-edge technology including Artificial Intelligence, that will automatically identify and detect any

contamination in the Organics waste stream. Additionally, it will provide the point of location of where the cart was serviced through latitude and longitude coordinates. Simply stated, cameras installed on a truck photograph material as the truck arm pours it into the truck's hopper. The computer system of cameras has been 'trained' on what to identify as contamination – non-organic, non-compostable material.

Green Cart Tonnage



Customer Engagement

Customer letters and flyers remained an active customer communication program. This correspondence helps customers learn how to use the recycle and organics programs correctly. Due to the sensitivity of the economic downturn during the pandemic, the Department halted assessing fines for incorrect program infractions (contamination) in April. However, the inspection process

equipped to work remotely from home. The team of six fielded 53,345 calls in FY 2020 in both English and Spanish.

A digital customer engagement tool that was heavily promoted in FY 2020 was the Department's mobile app. Although not a new product, the app underwent a brand transformation from My Waste to Recycle Coach and many



continued. On average, the Department mailed an estimated 8,000 letters and flyers per month to enhance customer education.

new features were launched. The most valuable new feature was the creation of a search engine, pre-loaded with over 350 common household items. Customers could

The most frequent and consistent touch point for SWMD customers are their green, blue and brown carts. However, if someone cannot distinguish them by color and given that they are all the same shape, that particular customer is at a clear disadvantage in the disposal process. Working with the cart manufacturer, *Toter*, titles in Braille began to be placed on cart lids in FY 2020. The messages were clear and simple – RECYCLE on the blue carts, TRASH on the brown carts, and GREEN WASTE on the green carts. Customers could begin to request Braille lids by calling 3-1-1. This initiative aligns with the City's overall focus on equity for all citizens.

Direct customer contact through the SWMD call center was uninterrupted as the Customer Service Representatives were



Customer Engagement

search for these items and the app would reveal how and where to dispose of them. This was a great advancement in learning to 'recycle right'.

The Department's Marketing division also launched campaigns around how to 'recycle right.' Conceptually based on the board game *Loteria*, key messages were developed around what should and what should not go into the green organics and blue recycle carts as demonstrated by animated game characters. The campaign was deployed across local television, billboards, VIA bus wraps and digital channels in both English and Spanish. The TV spot was nominated by the American Academy of Television Arts and Sciences for an EMMY award from the Lone Star Chapter.

To achieve greater consistency across all customer activities, the SWMD divisions of Marketing, Communications, Digital, Outreach, Customer Service, ReWorksSA, Customer touch points and Special Events were all combined into one group now known as Applied Customer Engagement (ACE). This team of 20 was aligned under the Marketing Manager in July.



For the second year in a row, the SWMD was nominated for a Lone Star EMMY



Outreach and Education

In April as schools began to close early due to COVID-19, the Outreach and Education team also halted all in-person presentations on recycling and organics. The team of four began to evaluate how to keep their education activities ongoing and the first immediate tactic was to record the presentations and post them online. Presentations were recorded for all age groups and several were made available in Spanish. These were uploaded to www.sarecycles.org and the division sent an email notification to over 14,000 local school and teacher contacts. In the month of May alone, the videos were viewed over 600 times. These online views, in addition to the number of presentations made from the beginning of the year enabled the Outreach and Education team to reach their FY 2020 performance measure goal of 1,200 presentations.

However, these pre-recorded presentations did not deliver the interactive element that makes education more successful. The team spent the summer months developing a better approach to virtual engagement.

The team scheduled four 'Facebook Live' events as a pilot for coordinating live presentations for the 2020-2021 school year. Promoted through social and digital media campaigns, the events featured not only the educational lessons but also video field trips to several SWMD operational sites plus interactive games. Between the four events, there were a total of 895 people participating on

Facebook, measured as clicks.

The field trips received the most positive comments. Participants were taken on tours of the Department's heavy machinery and Fleet shop, brush grinding operations, bulky Drop-Off Center operations and a visit to the City's Botanical Gardens where the SWMD routinely donates compost and mulch.

The team also introduced the learning platform KAHOOT! into the presentation format. This interactive platform was already a favorite tool for most teachers making it a logical decision for the Recycling Coordinators to use as well. Its major benefit is the interactive capabilities for games, quizzes, contests, questions and answers as well as incorporating videos, animations and other multi-media into the presentations.

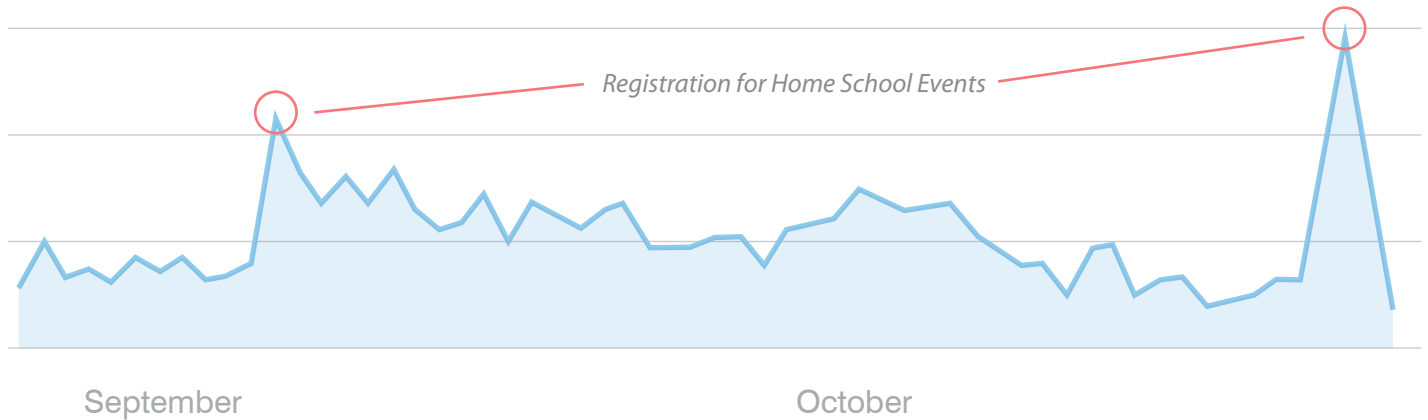
To begin the school year and getting the request for presentations jump started, the team deployed another email campaign to all contacts. In only two days, 179 presentations were scheduled.

As the team began to plan for the upcoming school year, a focus on developing performance measures was a priority. Historically, the group would strive to achieve a goal set only for number of presentations. This was a measure for the education function of the division. However, the



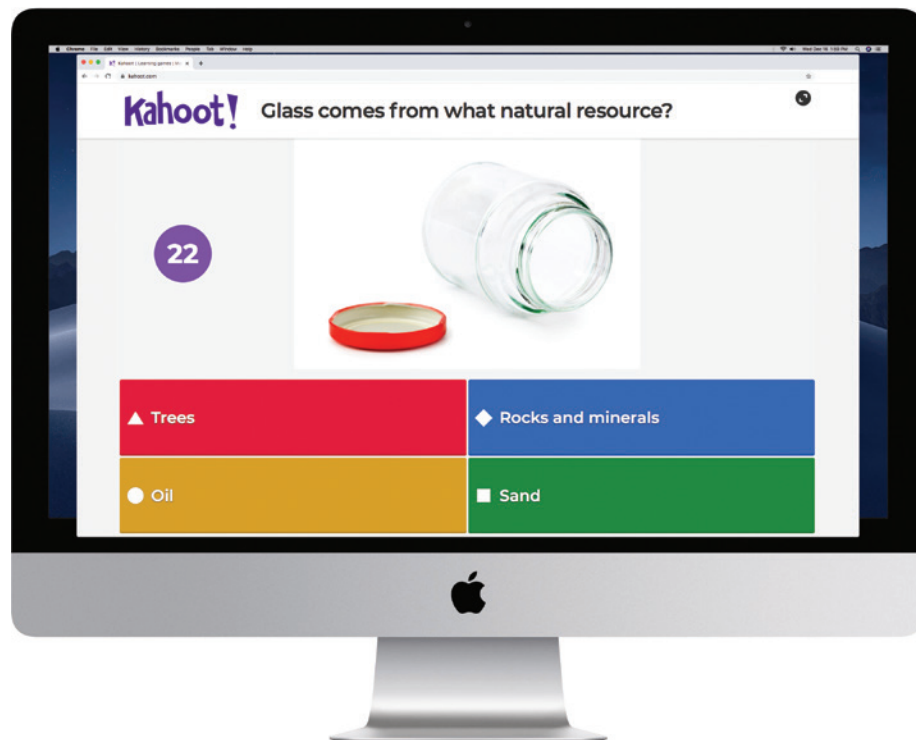
Outreach and Education

Key Spikes at sarecycles.org



group added the concepts of training and retention. Much like the girl and boy scout badge programs, an 'eco-scholar' program began initial development. A goal was established for 100 students to achieve that designation by completing recycling projects, research and other

activities next year. Regarding retention, the Recycling Coordinators agreed to strive for an overall 70% passing rate by all students that take the interactive quizzes which are part of the presentations.



We Thank Our Military Veterans

The Solid Waste Management Department is proud to have many distinguished veterans on our team – women and men who have served our country bravely. COVID-19 prevented us from hosting our annual recognition event on Veterans' Day and so we publicly thank them in this report.

Noel B. Andino	Gilbert Guerrero	Steven Roberts
Lyndon Banks	Paul C. Harris	Ricardo M. Robles
Albert Barrera	Vernon Harris	Jesus Rodriguez
Walter Barrett	Joe A. Hernandez	Raymond Rojas
Norman Caldwell	Clifford Hughes	Jose Luis Ruiz
Ricardo Cantu	Alfred Jimenez	William Russell
Ramon Casillas	Chris Kittler	Juan Salinas
Ramy Castilla	Ernest A. Lopez	Aaron Sanchez
Jose M. Cerda	Richard Love	Michael Sanchez
Michael Culbertson	Richard Maldonado	Sergio Scaturchio
Ramon Diaz, III	Antonio Martinez	Michael Scott
Amanda Ehlers	Jose L. Martinez	Agapito Shearer
Roger Escamilla	David McDaniel	Otto Sonnen
Tarik Esquerra	Francisco Muñoz	Jonathan Thornton
Ron Fletcher	Sam Muñoz	Glen Tobin
Nicholas Gamez	Ysidoro Olivo, Jr.	Tomas Torres
Victor Garcia	Doug Overton	Joe Uriegas
Adam Giarratano	Matthew Palacios	Juan Uriegas
Gary Gomez	Mario Palomo	David Vargas
Juan Gonzales	Michael Parker	John Vasquez
Roland Gonzales	Paul A. Pena	Alejandro Villalon
Brandon Good Shield	Jose Perez	Paul D. Villareal
Naomi Good Shield	Ruben Perez	Danny Viray
Edward Guajardo	Samantha Prentice	Ross Webb
Brian Guerra	Valeriano Reyna	

Best of Luck to Our Retirees

These women and men left the Department after years of dedicated service to start the next chapters of their lives. We appreciate all of their contributions to the SWMD, its mission and the City of San Antonio.

Esteban Aguirre

Stephen Haney

Jose Perez

Rick Alvarado

Joe Hernandez

Kenneth Ravenscroft

Santiago Campa

Rudolfo Hernandez

Carlos Reyna

Ralph Casillas

Jesse Isaac

Ernesto Reyna

Donald Darnell

Hoyt Jefferson

Joel Rodriguez

Dino Duncan

Robert Longoria

Ruben Roque

Adolph Esparza

Daniel Maciel

Rodolfo Serna

Calletano Gaitan

Patrick Martinez

Jesus Soliz

Carlos Gallegos

Ronald Mcrae

Robert Spenrath

Armando Garcia

Oscar Medrano

Samuel Tijerina

Virgilio Garza

Ronald Mercer

Cruz Trevino

Hector Gomez

Mateo Morales

Hector Villanueva

Norma Gomez

Oscar Moreno

Albert Gutierrez

Robert Ozuna



Executive Leadership

The customer and employee experiences remain our collective top priorities. Solid Waste Management customers deserve excellent service delivery and also for those services to be a good value. The women and men that deliver those services are the essential workers that keep our City, safe, clean and beautiful. Their safety and well-being are our highest commitments. This is our focus for the coming year of FY 2021 and this focus will not change in all the years that follow.



David Newman
Director



Josephine Valencia
Assistant Director



Nicholas Galus
Assistant Director



Walter Barrett
*Safety, Reliability,
Quality Assurance*



Lynn Cox
Council Affairs, Open Records



Gilbert Ramirez
Fiscal Administration



Audrey Zamora-Johnson
Assistant to the Director

David Badillo
Fleet Operations

Alfonso Castillo, Jr.
Northeast Collections

Ray Castillo
Southeast Collections

Andrew Gutierrez
*Brush and Bulky
Collections*

Marcus Lee
*Marketing,
Communications,
Outreach*

Martin Perez
Southwest Collections

Timothy Pittman
*Customer Account
Management*

Anthony Salazar
Northwest Collections

Salvador Ytuarte
Environmental Services

